Table of Excessive, Greatest and Least Monthly Rainfalls.-Continued.

STATION.	SPECIAL HEAVY.			Largest Monthly		
	Date.	Amt.	Duratiou	Amount.	STATION.	Amt.
Tennessec. Ohatianooga Teras.	8	1.10	1hr.30m.		Washington territory.	0.33
Denison San Antonio	6	6.20		9.04 8.95	Wisconsin.	0.10
Waco Sour Lake		6.10		7.67 7.58	Franklin	
Fort Stockton	4, 5	6.56 4.05		6.81 6.13	Cheyenne Fort Bridger	0.4
lacksboro Huntsville	6, 7	3.11		6.04	Fort Washakie	
Fort Concho Luling	7	3.05 2.64				
lamı near Presidlo Fort Elliott	4, 5 27	2.68 1.17	24 hrs. 40 m.			
Vermont.		*******		7.50	***************************************	
Vewport Voodstock		*******		7.22 6.47 6.30		
Stratford Virginia.				8.87		
ynchburg	25, 26	3.44 4.85 2.72		8.07 7.18	44 0 202004 ** 0 00**** . 4 4 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	
ariety Mills	10, 11 25, 26	3.95		7.18	***************************************	
West Virginia.  Morgantown  Helyetia				7.23 7.04	*******************************	

## HAIL.

Lancaster, Pennsylvania, 9th: A most destructive rain and hail storm passed over the southwest section of this county last night. Fields of tobacco ready for cutting were practically ruined, and the leaf can now only be used for fillings. It is estimated that the amount of damage caused will be considerably more than \$50,000. The corn crop also sustained some damage.

Springfield, Massachusetts, 8th: Severe storms, accompanied by hail, visited South Deerfield, Whateley and Sunderland, during the afternoon, doing an immense amount of damage to the unharvested tobacco crop. It is estimated that the dam-

age in each of the towns will be about \$15,000.

Anna, Illinois, 29th: Hail storm of considerable severity occurred about ten miles west of this place; many of the hailstones remained on the ground until the following day. No serious damage resulted.

Hillsdale, Michigan, 17th: Hail of considerable size fell a few miles south of this place, damaging corn to some extent.

Hail was also reported by the following stations:

Mount Washington, New Hampshire, 11th.
Morgantown, West Virginia, 21st.
Oswego, New York, 19th.
Milwaukee, Wisconsin, 9th.

Alpena, Michigan, 17th. Deadwood, Dakota, 21st.

Fort Benton, Montana, 28th. Fort Supply, Indian territory, 27th. Fort Elliott, Texas, 27th. Winnemucca, Nevada, 16th.

Mission, Idaho, 11th, 24th.

Fort Bidwell, California, 30th.

Creswell, Kansas, 27th. Wellington, Kansas, 27th.

Russell, Kansas, 27th.

Charlestown, Massachusetts, 8th.

Clinton, Missouri, 28th.

College Hill, Ohio, 8th. Dyberry, Pennsylvania, 8th.

Meadville, Pennsylvania, 19th.

Snow fell at the various stations during the month as follows: Fort Stevenson, Dakota, 30th: Scattering snow-flakes fell with rain from 10:00 a. m. to 12:00 m.

Fort Washakie, Wyoming, 18th: Heavy snow fell on the

New Chicago, Montana, 28th: Light snow fell at intervals during the morning.

Deer Lodge, Montana, 28th.

Pioche, Nevada, 16th: Large snow-flakes fell, with rain, during the day; 17th, light snow from 9:40 to 10:30 a.m.

Eagle Rock, Idaho, 17th: Mountains and foot-hills covered with snow.

Emigrant Gap, California, 16th: Snow has fallen to a depth of four inches.

Reno, Nevada, 16th: The first snow of the season fell in the mountains, eight miles southwest of station, last night.

Fort Shaw, Moutana, 29th. Fort Ellis, Montana, 19th, 27th.

Fort Assinniboine, Montana, 28th.

Helena, Montana, 29th.

Pike's Peak, Colorado, 1st, 2d, 4th, 5th, 7th, 11th, 19th, 22d, 26th, 27th.

Fórt Lapwai, Idaho, 29th.

Fort Buford, Dakota, 30th.

Fort Maginnis, Montana, 18th, 28th, 29th.

Fort Bridger, Wyoming, 17th, 26th. Fort Klamath, Oregon, 30th.

Mount Washington, New Hampshire, 29th.

Tobacco Garden, Dakota, 30th.

Fort Shaw, Montana, 28th. Pike's Peak, Colorado, 1st, 2d. Santa Fé, New Mexico, 4th.

## COTTON REGION REPORTS.

The following table shows the average rainfall, mean of maximum and mean of minimum temperatures, for the month of September, 1882, in each of the cotton districts as shown on chart vi., issued with the April REVIEW.

Meteorological Record for the Cotton Districts for the month of September, 1882.

DISTRICTS.	Average rain- fall in inches.	Mean of the maximum.	Mean of the minimum.
New Orleans Sayannah Charleston Atlanta Wilmington Memphis Galveston Vicksburg Montgonery Augusta Little Rock	4.94 4.73 3.15 3.49 1.69 3.50 1.73 3.10 4.43	86.7 87.1 54.8 82.3 81.7 82.7 86.8 85.3 84.3 83.9 83.9	67.7 67.9 64.9 62.8 60.3 64.8 61.7 62.0 64.4 59.0

## WINDS.

The prevailing direction of the winds during the month of September, 1882, at Signal Service stations are shown on chart number ii., by arrows flying with the wind. It will be seen from the chart that the prevailing winds along the Atlantic coast were mostly from the north and northeast; in the lower lake region they were from the northeast and east, except southwest at Toledo; in the Ohio valley, Tennessee and the Gulf states, from northwest to northeast; in the upper Mississippi and Missouri valleys, from the south and southeast; they were variable in the Rocky mountain regions; and on the Pacific coast, from north to west.

## TOTAL MOVEMENTS OF THE AIR. [In miles.]

The following are the largest total movements at the Signal Service stations: On the summit of Mount Washington, 21,771; Block Island, Rhode Island, 12,011; Sandy Hook, 11,971; Hatteras, North Carolina, 11,622; Kittyhawk, North Carolina, 11,193; Barnegat, New Jersey, 11,140; Portsmouth, North Carolina, 11,023; Cape May, New Jersey, 9,968; Cape Henry, Virginia, 9,292; Cape Mendocino, California, 9,225; Galveston, Texas, 9,153; Indianola, Texas, 9,151; Port Eads, Louisimountains near station, during the day; 29th, light snow fell ana, 8,936; Sandusky, Ohio, 8,575; Fort Macon, North Carofrom 1:00 to 7:00 a.m. Sandusky, Ohio, 8,575; Fort Macon, North Carofrom 1:00 to 7:00 a.m.